

AMENDMENT UNDER 37 C.F.R. § 1.111

U.S. Application No. 09/778,015

Attorney Docket No. Q62980

**REMARKS**

Upon entry of the present Amendment, claims 1-5 and 8-13 are all the claims pending in the application. Claims 1, 3 and 5 are amended, and new claims 8-13 are added. No new matter is presented. Claims 6-7, which were previously withdrawn from consideration by virtue of the Response to Restriction Requirement filed September 26, 2002, are hereby cancelled without prejudice or disclaimer. Applicant reserves the right to file Divisional Applications directed to the non-elected claims.

To summarize the Office Action, claims 3-5 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Shinozuka et al. (U.S. Patent No. 6,404,728, hereinafter “Shinozuka”), and claims 1-3 and 5 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tanaka (U.S. Patent No. 5,068,844) in view of Shinozuka. The outstanding rejections are traversed, as discussed below.

**Claim Rejections - 35 U.S.C. § 102(e)**

Applicant notes that amended claim 3 defines a lens drive device and recites, *inter alia*, the features of a plurality of drive coils having a first end for connection to a drive source and a second end for an internal connection are fixed on the molded lens holder such that the plurality of drive coils are energized through the plurality of wire-form elastic members, and first and second boards respectively provided on both sides of the objective lens such that said objective lens is located between said first and second boards in the first axial direction. Claim 3 further recites the feature of the drive coils are arranged on said first and second boards respectively, and

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a connection wire that is integrally molded while being contained in the lens holder extends between the drive coils positioned on both sides of the objective lens in the first axial direction that connects the second ends of the drive coils to form the internal connection. Applicant respectfully submits that Shinozuka fails to suggest all the features of claim 3, as evidenced by the following.

In the Non-Final Office Action dated February 8, 2006, the Examiner contends that wiring boards 48 of Shinozuka correspond to the connection wire as previously recited in claim 3. However, wiring boards 48 of Shinozuka are not used for electrical connection between the driving coils. In this regard, Applicant notes that Shinozuka teaches that “a pair of flexible wiring boards 48, used for electrical connection between the coils 12, 13 and the wires 6, are adhered to the front face of the lens holder 3.” *See* Shinozuka at col. 12, lines 10-13 (emphasis added). Further, Shinozuka teaches that “projection pieces (indicated with numerals ‘52’ in Fig. 7), which are extended from the pads 6a located on the lens holder side, are soldered to the flexible wiring boards” and “[w]ith this structure, the coils 12 and 13 and the wires 6 are electrically connected to each other.” *See* Shinozuka at col. 13, lines 16-21. Also, Applicant notes that coil 12 is a focusing coil while coil 13 is a tracking coil.

Thus, as taught by Shinozuka, the flexible wiring boards 48 provide electrical connection between coil 12 and wire 6 and for electrical connection between coil 13 and another wire 6. In contrast, claim 3 recites that the connection wire extends between the drive coils positioned on both sides of the objective lens in the first axial direction and connects the second ends of the drive coils to form the internal connection.

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Also, as shown in Figure 8, the flexible wiring boards 48 of Shinozuka do not extend between the drive coils, and the coils 12 and 13 of Shinozuka are not arranged on both sides of the objective lens 2. Applicant refers the Examiner to Figure 1 of Shinozuka, which shows the positional relationship between these elements as assembled. Thus, Applicant submits that Shinozuka additionally fails to suggest the feature of first and second boards respectively provided on both sides of the objective lens such that said objective lens is located between said first and second boards in the first axial direction.

Accordingly, reconsideration and withdrawal of the rejection of claim 3 is requested. Further, Applicant submits that claim 4 is allowable at least by virtue of depending from claim 3 and by virtue of the features recited therein.

With respect to claim 5, Applicant notes that claim 5 defines a suspension unit for a lens drive device and recites features analogous to those discussed above with respect to claim 3, which are likewise neither taught nor suggest by Shinozuka. Accordingly, reconsideration and withdrawal of the rejection of claim 5 is requested.

#### **Claim Rejections - 35 U.S.C. § 103(a)**

With respect to the rejection of claim 3 under 35 U.S.C. § 103(a) based on Tanaka in view of Shinozuka, Applicant submits that neither Tanaka nor Shinozuka, even assuming *arguendo* that the Examiner's asserted motivation to combine is proper, fails to teach or suggest all the claimed features. For instance, as shown in Figures 1 and 2, Tanaka teaches a lens holding member 25 in which tracking coils 29 and 30 are wound around opposite end portions,

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and a focusing coil which is wound around side surfaces of the lens holder member. *See* Tanaka at col. 3, lines 59-63.

Thus, Tanaka fails to suggest at least the feature of the drive coils are arranged on said first and second boards respectively, and a connection wire, as claimed, that extends between the drive coils positioned on both sides of the objective lens in the first axial direction that connects the second ends of the drive coils to form the internal connection. Further, Applicant submits that Tanaka's teaching of wound coils, which are wound around the periphery of the lens holder body, does not suggest the claimed first and second boards respectively provided on both sides of the objective lens.

Further, at least for the reasons discussed above with respect to the 35 U.S.C. § 102(e) rejection of claim 3 based on Shinozuka alone, Applicant submits that Shinozuka fails to compensate for at least these deficiencies of Tanaka.

Accordingly, reconsideration and withdrawal of the rejection of claim 3 is requested. Further, Application submits that claim 4 is allowable at least by virtue of its dependency.

With respect to independent claims 1 and 5, which respectively define a lens drive device and a suspension unit for a lens drive device reciting features analogous to those discussed above which are neither taught nor suggested by Tanaka or Shinozuka, Applicant submits that claims 1 and 5 are likewise allowable for similar reasons. Reconsideration and withdrawal of the rejection of claims 1 and 5 is therefore requested. Further, Applicant submits that claim 2 is allowable at least by virtue of its dependency.

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**New claims**

In order to provide additional coverage merited by the scope of the invention, Applicant is adding new claims 8-13, which respectively depend from claims 1, 3 and 5. Claims 8-13 are allowable at least by virtue of their dependency and by virtue of the features recited therein.

**Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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Date: **July 7, 2006**